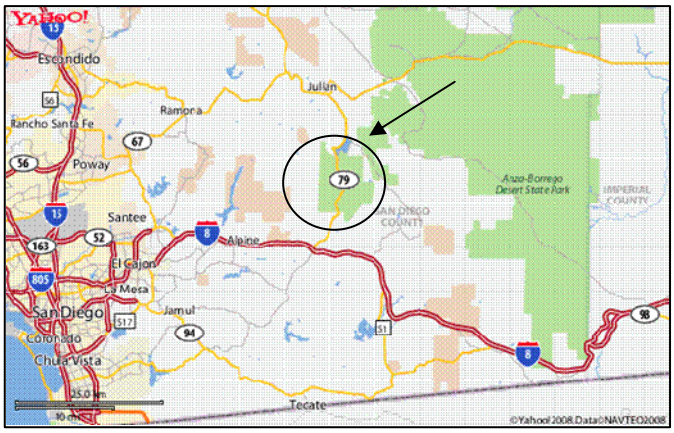
1-14-09

Reforestation Project at Cuyamaca Rancho State Park

Project Description: This project consists of conifer forest restoration activities in Cuyamaca Rancho State Park in San Diego County, California. The purpose of the project is to re-establish patches of landscape with native conifer trees that will allow for progression of reforestation on acreage in the burned areas of the park. The project provides significant wildlife, recreation, climate, and watershed benefits. It includes four phases of reforestation involving 2500 acres. In addition, the reforestation work will be monitored to determine the impacts of regional climate change to recovery of vegetative cover. Fire risk management projects will be implemented to protect the project area from future catastrophic fire events. The project is being conducted by the California Department of Parks and Recreation (DPR) in partnership with the California Department of Forestry and Fire Protection (Cal Fire), San Diego State University (SDSU), and University of California, Santa Barbara.



Project Location: Cuyamaca Rancho State Park is located 50 miles east of San Diego on Highway 79 in California. The park consists of 25,000 acres located within the Peninsular Range of mountains with elevations that range between 3,500 feet and 6,500 feet. Vegetation in the park is a mix of grassland, chaparral, oak woodland, mixed conifer and hardwood forests (Coulter pine, canyon live oak, black oak) and coniferous forests (sugar pine, incense cedar, Jeffrey pine). Coniferous forests, mixed conifer forests, and hardwood forests once dominated the eastern and the northern aspects in the higher elevations. These forests were almost completely destroyed in the fall of 2003 by the Cedar Fire when over 24,000 acres, representing over 95% of the park burned. This fire was so intense that much of the original coniferous forest area is devoid of the original conifers and little natural regeneration has been observed.

Red Breasted Sapsucker

Co-Benefits: The coniferous forest and mixed conifer/hardwood forest that existed prior to the 2003 Cedar Fire has largely been replaced with ceanothus. The ceanothus vegetative cover is expected to continue to dominate the forest area for the foreseeable future in the absence of the reforestation activities. Restored coniferous forest habitat in the park provide important protected areas for a wide variety of native mammal and bird species in a region experiencing strong and continuous development pressure. This kind of habitat is critical to forest dwelling species such as the red-breasted sapsucker, red-breasted nuthatch, and golden-crowned kinglet. The project will also assist in preventing the spread of invasive weeds and reducing erosion risks which protect watershed function, archaeological sites, botanical reserves and recreational capacity of the park.

Carbon Offset Quantity and Accounting: The benefits of the proposed project come from accelerated restoration of the forested landscape. The climate benefits include the ability to reduce atmospheric carbon dioxide at a rate of 1-3 metric tons per acre per year and the potential storage of over 200 metric tons of carbon dioxide equivalent per acre. DPR and Cal Fire are proposing to register the project with the CCAR, using CCAR's Forest Protocols.

Estimated CO2 Reductions due to the Project Activity at Cuyamaca Rancho State Park	
	Additional Carbon Dioxide Equivalent Metric Tons Sequestered
During Project Years	Total Project
1-5	11,731
6-10	47,658
11-20	92,383
21-50	204,929
51-100	147,373
Total Years 1-100	504,075

Lookout Fire Road Test Site
With Tubing for Browse Protection

Project Activities: Project activities include planting 3 initial test sites (completed in March 2008), and four phases of landscape level reforestation involving up to 2500 acres depending on funding. Seedlings will come from local seed sources (Zone 998) and include a mix of approximately 80% Jeffrey pine (Pinus jeffreyi), 15% Coulter pine (Pinus coulteri), and 5% incense cedar (Calocedrus decurrens). The planting will incorporate a random pattern with an average of 250 seedlings per acre. Species mix and spacing are designed to recreate historical healthy stand conditions over time. Areas targeted for reforestation include acreage with a lack of natural regeneration associated with burn intensity. Pine regeneration surveys in the park have been completed by graduate students at SDSU. In addition, acreage will be prioritized by soil conditions, and strategic position to assist in providing future seed sources for natural succession. The project includes work to reduce excess fuel buildup in the areas to be planted and in buffers around the planted areas. After ten years, the new reforested areas will be managed with thinning treatments to reduce stand density to approximately 100 stems per acre. Adaptive evaluation studies will be coordinated through a research project at University of California, Santa Barbara.

Reforestation Project at Cuyamaca Rancho State Park Reforestation Phases I, II, III, & IV			
	Acres	Cumulative	Planting Complete By:
Phase I	300	300	March 2009
Phase II	700	1000	March 2010
Phase III	700	1700	March 2011
Phase IV	800	2500	March 2012

For further information, please contact:
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